

IN THE CLAIMS:

Please amend claims 6, 9, 10, 12, 13, 14, and 15, as follows:

1. (Original) A flame arrestor for a flowing explosive gas (4), having a flame barrier (10, 20, 30) with a large number of defined passage gaps (17, 18), whose gap cross section is set with regard to the properties of the flowing gas (4), characterized in that second gaps (18) with a smaller gap cross section are arranged adjacent to the first gaps (17) having the selected gap cross section.
2. (Original) The flame arrestor as claimed in claim 1, characterized in that the gaps (17, 18) are implemented on a disk-like flame barrier (10, 20, 30).
3. (Original) The flame arrestor as claimed in claim 2, characterized in that the gaps (17, 18) are arranged on turns (12, 13) formed in the shape of rings or spirals.
4. (Original) The flame arrestor as claimed in claim 3, characterized in that a first number of turns (12) having first gaps (17) and a second number of turns (13) having second gaps (18) are provided alternately.
5. (Original) The flame arrestor as claimed in claim 4, characterized in that a turn (12) having first gaps (17) and a turn (13) having second gaps (18) are provided alternately.
6. (Currently Amended) The flame arrestor as claimed in ~~one of claims 3 to 5~~, claim 3, characterized in that the disk-like flame barrier (~~10, 20, 30~~) is formed by a corrugated metal strip (~~15, 15'~~) wound spirally together with a smooth metal strip (~~14~~), a first corrugated metal strip (~~15~~) having larger corrugations (~~16~~) forming the turns (~~12~~) having the first gaps (~~17~~); and a corrugated metal strip (~~15'~~) having smaller corrugations forming the turns (~~13~~) having the second gaps (~~18~~).
7. (Original) The flame arrestor as claimed in claim 3, characterized in that the turns (12,

13) have the first and second gaps (17, 18) over their length.

8. (Original) The flame arrestor as claimed in claim 7, characterized in that, over the length of the turns (12, 13), in each case a first number of first gaps (17) and a second number of second gaps (18) are arranged alternately one after another.

9. (Currently amended) The flame arrestor as claimed in claim 7 ~~or 8~~, characterized in that the disk-like flame barrier ~~(10, 20, 30)~~ is formed by a corrugated metal strip wound spirally together with a smooth metal strip ~~(14)~~, and in that the corrugation of the corrugated metal strip alternately has shorter or longer lengths of the corrugations in order to form the first and second gaps ~~(17, 18)~~.

10. (Currently Amended) The flame arrestor as claimed in ~~one of claims 1 to 9~~, claim 1, characterized in that the ratio of the number of second gaps ~~(18)~~ to the number of first gaps ~~(17)~~ varies over the area of the flame barrier ~~(30)~~.

11. (Original) The flame arrestor as claimed in claim 10, characterized in that the ratio of the number of second gaps (18) to the number of first gaps (17) decreases from inside to outside.

12. (Currently Amended) The flame arrestor as claimed in ~~one of claims 1 to 11~~, claim 1, characterized in that the second gaps ~~(18)~~ all have the same gap cross sections.

13. (Currently Amended) The flame arrestor as claimed in ~~one of claims 1 to 12~~, claim 1, characterized in that the second gaps ~~(18)~~ are formed with at least two different gap cross sections.

14. (Currently Amended) The flame arrestor as claimed in ~~one of claims 1 to 13~~, claim 1, characterized in that the first and second gaps ~~(17, 18)~~ are formed with the same gap lengths.

15. (Currently Amended) The flame arrestor as claimed in ~~one of claims 1 to 14~~, claim 1, characterized in that the cross-sectional area of the second gaps ~~(18)~~ amounts to at most 50% of the cross-sectional area of the first gaps ~~(17)~~.